Notice of Allowability	Application No.	Applicant(s)	
	10/060,826	PICKARD ET AL.	
	Examiner	Art Unit	
	Wilson Lee	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *7/9/07*.

2. ☒ The allowed claim(s) is/are *1-24*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Wilson Lee
Primary Examiner
Art Unit: 2163

Remarks

A Request for Continued Examination (RCE) filed on 7/9/07 is acceptable and has been established. An action on the RCE follows.

Allowable subject matter

Claims 1-24 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests the following limitations, in combination with the remaining elements as disclosed in the following independent claims:

- a ferrite core transformer, the resonantly tunable circuit being connected to one end of a winding of the ferrite core transformer and the RF antenna being connected to another end of the winding of the ferrite core transformer such as required by claim 1.
- a ferrite core transformer coupled to the resonantly tunable circuit, wherein a secondary winding of the transformer is a single-turn winding and a primary winding of the transformer is a multi-turn winding, the secondary winding is coupled to the tunable circuit such as required by claim 3.
- a ferrite core transformer having a single-turn secondary winding and a multi-turn primary winding, and the resonantly tunable circuit being connected to the secondary winding, wherein the transformer further

comprises a core which is made of a plurality of ferrite cores such as required by claim 4.

- a ferrite core transformer having a secondary winding that couples the transformer to the resonantly tunable circuit, and also having a primary winding, wherein the transformer further comprises a core which is made of a plurality of ferrite cores such as required by claim 5.
- a ferrite core transformer, said resonantly tunable circuit being connected to one end of a winding of said ferrite core transformer, the one end of a winding of said ferrite core transformer being a secondary winding that couples said ferrite core transformer to said resonantly tunable circuit and said ferrite core transformer also having a primary winding, wherein the turn ratio between the primary winding and the secondary winding ranges from 3:1 to 8:1 such as required by claim 6.
- a ferrite core transformer having a secondary winding that couples the transformer to the resonantly tunable circuit, and also having a primary winding, wherein the turn ratio between the primary winding and the secondary winding ranges from 3:1 to 8:1, and the transformer comprises a core made of 12 ferrite cores with a 1.25 inch OD and 0.75 inch ID, made of M-type ferrite such as required by claim 8.
- a ferrite core transformer, said resonantly tunable circuit being connected to one end of a winding of said ferrite core transformer; and an RF power supply connected through a 50f coaxial cable to an input of the matching

network and the RF antenna (inductive coil) connected to an output of the matching network such as required by claim 11.

- a ferrite core transformer, said resonantly tunable circuit being connected to one end of a winding of said ferrite core transformer; an RF antenna connected to an output of the matching network; a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma such as required by claim 12.
- a ferrite core transformer coupled to the resonantly tunable circuit; an RF antenna connected to an output of the matching network; and, a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma, wherein a secondary winding of the transformer is a single-turn winding and a primary winding of the transformer is a multi-turn winding, and the secondary winding couples the transformer to the resonantly tunable circuit such as required by claim 14.
- a ferrite core transformer having a single-turn secondary winding and a multi-turn primary winding, and the resonantly tunable circuit being connected to the secondary winding; wherein there is an RF antenna connected to an output of the matching network; and, a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma; and, wherein the transformer further comprises a

core which is made of a plurality of ferrite cores such as required by claim 15.

- a ferrite core transformer coupled to the resonantly tunable circuit, wherein there is an RF antenna connected to an output of the matching network; and, a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma; and, wherein the plasma ion or electron generator is a multi-cusp plasma generator such as required by claim 18.
- a ferrite core transformer coupled to the resonantly tunable circuit; an RF antenna connected to an output of the matching network; and, a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma, wherein the transformer comprises both a single-turn secondary winding that couples the transformer to the tunable circuit and a multi-turn primary winding, and the transformer further comprises a core that is made of a plurality of ferrite cores such as required by claim 21.
- a ferrite core transformer coupled to the resonantly tunable circuit; an RF antenna connected to an output of the matching network; and, a plasma ion or electron generator having the RF antenna mounted therein for inductively generating a plasma, wherein the plasma ion or electron generator is a multi-cusp plasma generator such as required by claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to the application may be submitted by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

7/18/07